

MICHIGAN ANNUAL REGION 8 TRAUMA REPORT-2022

REGION 8

Statutory Reference: R325.132 Rule 8 (3) (a) At least quarterly, a region shall submit evidence of ongoing activity, such as meeting notices, minutes to the department. Annually the regional trauma advisory council shall file a report with the department which describes progress toward system development, demonstrates ongoing activity, and includes evidence that members of the regional trauma advisory council are currently involved in trauma care.

OVERVIEW AND ASSESSMENT OF RESOURCES

Demographics:

The Upper Peninsula of Michigan has a land mass that if oriented north-south would cover 1/3 of the Lower Peninsula. While the sparsely populated Upper Peninsula contains only 3% of the state population, the area continues to amass tourism and outdoor recreation surges. Region 8 Trauma participates in the State Ride Right / Ride Here campaign as a means of informing the Michigan DNR and the Michigan Snowmobile and ORV Association of our injury findings and prevention needs. Pictured Rocks National Lakeshore located in Alger County has surpassed Mackinac Island as the number one tourist destination with over a million visitors mostly during the summer months. This is a very remote area of wilderness with spotty to in-existent cellular coverage, one EMS agency, and a small, critical access hospital in Munising.

According to the 2021 Upper Peninsula Community Health and Needs Assessment, 17.7% of Michigan residents are aged 65 years or older, while in the Upper Peninsula 22.9% fit this description. All counties in the Upper Peninsula have a higher percentage of residents aged 65 years or older than the state average, ranging from Houghton County, with its large college population, with 17.9%, to Ontonagon County with 37.7%. 3-2. If the college populations and the prison populations are subtracted, the percentage of persons 65 years and older increases from 22.9% to 24.9%. Except for Marquette County, median income in each county is below the state median income. With the exceptions of Alger and Houghton Counties, all counties have a higher percentage of household with children 18 years and younger living in poverty than the statewide percentage.

There are 14 hospitals in the Region 8 Trauma Network and one hospital in St. Ignace that aligns with Region 7 because of their Medical Control Authority's boundaries. The geographic connection to Wisconsin means Menominee County has oversight by a Wisconsin Medical Control Authority and there are no hospitals within that county. In the past year, corporate health systems purchased additional hospitals. There are now five (5) health systems in Region 8: Aspirus, Wausau, Wisconsin; UP Health System by LifePoint, Brentwood, Tennessee; OSF

Healthcare, Peoria, Illinois; Marshfield Medical, Marshfield, Wisconsin; MyMichigan, Midland, Michigan.

Medical Control Authorities:

MCA Name	Medical Director
Baraga	Jon Neufeld, MD
Delta	Christopher Faber, MD MPH
Dickinson	Amadeo Sturla, MD
Eastern	Kyle Raycraft, MD MBA
Gogebic Iron Ontonagon	Eric Maki, MD
Keweenaw Houghton	vacant
Luce	Steven A. Vix, MD
Marquette Alger	Michael Mlsna, MD
Schoolcraft	David Schoenow, MD

Designation Status of Facilities in Region:

Facility Name	Designated Yes or No	Level of Designation
Aspirus Iron River	N	
Aspirus Ironwood	Y	IV
Aspirus Keweenaw	N	
Aspirus Ontonagon	Y	IV
Baraga County Memorial	Y	IV
Helen Newberry Joy	Y	IV
Marshfield Medical Dickinson	N	Provisional IV
Munising Memorial	N	Provisional IV
MyMichigan Sault	Y	III
OSF St. Francis	Y	IV

Schoolcraft County Memorial	N	Provisional IV
UP Health System Bell	N	Provisional IV
UP Health System Marquette	Y	II
UP Health System Portage	Y	III

Governance:

Regional Trauma Network (RTN) Board

	Name and Title
Chairperson	Shelly Reeves, HNJH Trauma Program Coordinator and Luce County MCA Coordinator
Vice Chairperson	Bob Kirkley, Aspirus MedEvac Regional Director and Gogebic Iron Ontonagon MCA Coordinator

Regional Trauma Advisory Council (RTAC)

	Name and Title
Chairperson	Shelly Reeves, HNJH Trauma Program Coordinator and Luce County MCA Coordinator
Vice Chairperson	Jake Smith, Guardian Flight Program Director

Regional Professional Standards Review Organization

	Name and Title
Chairperson	Ryan Edwards, MD, UPHS Marquette Trauma Medical Director
Vice Chairperson	Wade Liston, MD, UPHS Portage Trauma Medical Director

Governance Activity Report:

- Regional Trauma Network Board (RTN Board): One in-person meeting was held in conjunction with the UP EMS Conference. Elections occurred October 2022 with above officers seated. Pat Hirt, longstanding RTN Chair, has retired from MyMichigan Sault. Modified bylaws regarding the Open Meetings Act have been submitted to the state.
- Regional Trauma Advisory Council (RTAC): No change.
- Regional Professional Standards Review Organization (RPSRO): RTN seated members and RPSRO met in October with elections, PI Plan, and regional analysis as topics.

Work Plan Objective Progress and Highlights

Injury Prevention

Indicator 325.135(2) 306.2: The RTN is active within the region in the monitoring and evaluation of regional injury prevention (IP) activities and programs.
Regional Score: 2 in 2017 workplan; 2 in 2020 workplan
Objective: By December 2020, the Regional Trauma Coordinator will survey regional injury prevention stakeholders including hospitals, senior provider networks, Medical Control Authorities, and others. The database shall contain program type, audience, locations, and contact persons.
Progress: Completed.

Indicator 325.135(2) 203.5: The RTN has developed a written injury prevention plan. The injury prevention plan is data driven and targeted programs are developed based upon high injury risk areas. Specific goals with measurable objectives are incorporated into the injury prevention plan.
Regional Score: 1 in 2017 workplan; 2 in 2020 workplan
Objective: By December 2020, the RTN will have communicated to injury prevention stakeholders the Regional Injury Prevention Plan that addresses at a minimum, the trauma registry identified top 3 injuries in the region; program identification, reach, and impact. The RTN will request feedback by March 2021 from the stakeholders regarding overlap and gaps. The plan shall be reviewed annually by the RTAC and RTN.
Progress: In progress.

Indicator N/A 207.4 (New Indicator from Strategic Plan): A trauma system public information and education plan exists that heightens public awareness of trauma as a disease, the need for trauma care system and the prevention of injury. The RTN will promote evidence based primary injury prevention activities and projects.
Regional Score: New indicator. 1 in 2020 workplan
Objective: By December 2023, the region will support the Michigan Trauma Coalition's trauma system messaging campaign currently in development with a focus on the messages applicable throughout the region.
Progress: Messages shared to RTN and RTAC and posted on the R8TRAUMA Facebook page. Completed.
Objective: Region 8 Trauma has collaborated with Region 8 MCA Network to have a page on the MCAN website with an anticipated go live date of December 2020. This website will be a publicly accessible location for items approved by the RTN to be placed there and populated by the Regional Trauma Coordinator (RTC).

Progress: The RTC self-educated on the website software to complete this objective and continues to provide updates and maintenance to the site.

Communications

Indicator 325.132(3)(c)(ii)(B) 302.10:

There are established procedures for EMS and trauma system communications for major EMS events or multiple jurisdiction incidents that are effectively coordinated with the overall regional response plans.

Regional Score: 2 in 2017 workplan; 3 in 2020 workplan

Objective: Ongoing through December 2023, Regional Trauma shall continue to review and support Regional Healthcare Preparedness Communications initiatives when they are brought to the RTAC and RTN. The Regional Trauma Coordinator is to continue throughout this three-year workplan to be a Regional Preparedness board member representing Regional Trauma.

Progress: The RTC authored a regional communications plan and had the Region 8 Homeland Security Board, Region 8 MCA Network, and Region 8 Healthcare Preparedness endorse it. The document will be reviewed in 2023.

Indicator 325.132(3)(c)(ii)(B) 302.9:

There is a procedure for communications among medical facilities when arranging for inter-facility transfers including contingencies for radio or telephone system failure.

Regional Score: 2 in 2017 workplan; 4 in 2020 workplan

Objective: Regional Healthcare Preparedness utilizes the Regional Trauma survey of hospital communication redundancies and Regional Trauma shall update the survey by January 2021.

Progress: Completed.

Indicator N/A 105.7 (New Indicator from Strategic Plan):

An assessment of the needs of the general medical community, including physicians, nurses, pre-hospital care providers and others, concerning trauma system information has been conducted.

Regional Score: new indicator 1 in 2020 workplan

Objective: By January 2021, hospitals and MCAs within Region 8 will be surveyed to determine the following: 1. How they inform the broad medical community about trauma, 2. Who they inform, 3. When they inform, 4. What is inclusionary to the process and what is disseminated. Survey information will be shared with the Regional Trauma Network. Regional Trauma shall continue to utilize its Facebook page throughout this three-year workplan for topics such as injury prevention initiatives, educational notices, national literature, and publication sharing.

Progress: Survey analysis reflected no uniformity in messaging, if there was messaging, by the regional trauma participants. R8TRAUMA Facebook page will take a greater emphasis

on informing its followers. The RTC has been invited to other regional organization meetings to explain what a trauma center is and its importance in healthcare of the injured. The Northern Michigan University Center for Rural Health is also creating a blog article regarding trauma centers to increase public awareness.

Infrastructure

Indicator 325.132(3)(c)(ii)(E) 302.1:

There is well-defined regional trauma system medical oversight integrating the needs of the trauma system with the medical oversight of the overall EMS system.

Regional Score: 1 in 2017 workplan; 2 in 2020 workplan

Objective: By January 2021, the hospital trauma program managers and each MCA contact person shall participate in a survey conducted by the Regional Trauma Coordinator on how they assure medical directors collaborate on EMS trauma protocols.

Progress: Survey findings showed that unless the trauma medical director and the MCA medical director were the same person, this collaboration was not occurring.

Objective: By June 2021, the RTN shall review the survey and author a regional benchmark regarding formal trauma protocol reviews by trauma and MCA medical directors.

Progress: The RTN issued a regional directive that was distributed to the RTAC in December of 2021 that stated that MCA meeting minutes and hospital trauma program meeting minutes will contain evidence of the MCA and trauma program medical directors collaborating on EMS protocols, clinical oversight, findings, and corrective action plans.

Indicator 325.132(3)(c)(ii)(E) 302.2:

There is a clearly defined, cooperative, and ongoing relationship between regional trauma physician leaders and the EMS system medical directors in the region.

Regional Score: 3 in 2017 workplan; 2 in 2020 workplan

Objective: By December 2021, the Regional Trauma Coordinator will survey each hospital trauma program manager and each MCA contact person regarding formal trauma medical director and MCA medical director cooperative relationship including communication, program resolution, and coordination of efforts.

Progress: Survey completed with results showing that most areas had no proof of this occurring, and some areas did not know each other's personnel and scope.

Objective: By June 2022, the RTN shall review the survey results and develop regional benchmarks that define the coordination of efforts (trauma medical director and MCA medical director) more formally.

Progress: The RTN issued a regional directive that was distributed to the RTAC in December of 2021 that stated that MCA meeting minutes and hospital trauma program meeting minutes will contain evidence of the MCA and trauma program medical directors collaborating on EMS protocols, clinical oversight, findings, and corrective action plans.

Indicator 325.135(6) 303.1:
The regional trauma plan has clearly defined the roles, resources and responsibilities of all acute care facilities treating trauma, and of facilities that provide care to specialty populations (burns, pediatrics, other).
Regional Score: 1 in 2017 workplan; 3 in 2020 workplan
Objective: By June 2021, the RTN shall expand the current 24/7 medical specialties database to include information from each hospital on what facilities they recommend specialty populations (burns, pediatrics, TBI rehabilitation, other specialty rehabilitation) be transferred to, which may be out of state.
Progress: In progress. Covid delayed.
Objective: By September 2021, the Regional Trauma Coordinator will share the database with the Regional MCA Network for informing their transfer agencies. Updates to the database will be provided by the hospital trauma program managers to the Regional Trauma Coordinator, as needed. The database shall be shared with new trauma program managers. Triennially, the database will be reviewed and updated.
Progress: In progress. Covid delayed.

Indicator 325.135(6)(c) 303.2:
The regional trauma network plan should ensure that the number, levels, and distribution of trauma facilities are communicated to all partners and stakeholders. The RTN should develop procedures to ensure that trauma patients are transported to an appropriate facility that is prepared to provide care.
Regional Score: 1 in 2017 workplan; 1 in 2020 workplan
Objective: By February 2022, hospital will participate in a survey regarding their written diversion plans and what types of incidents cause diversion, who has the authority enact the plan, what the plan contains regarding who is notified and how it is documented.
Progress: Most hospitals have submitted their diversion plans.
Objective: By August 2022, the RTAC will review the findings and provide recommendation to the RTN of minimum standards to be included in hospital diversion plans.
Progress: Delayed because of Covid, this objective will be approached in 2023.

Indicator 325.132(3)(c)(ii)(E) 208.2: (New Indicator from Strategic Plan)
The incident management and trauma systems have formal established linkages for system integration and operational management. This is directed at the Trauma Network's collaboration with the Regional Healthcare Coalition.
Regional Score: new indicator 2 in 2020 workplan
Objective: Through December 2023, the Regional Trauma Coordinator will be the liaison to preparedness as evidenced by meeting participation and involvement as a Regional Medical

Coordination Center member with subsequent updates at each RTAC and RTN meeting, inclusion in mass casualty planning, exercises, and real events.
Progress: The RTC has asked Regional Preparedness for R8MCC refresher training of its membership. The RTC has participated in one exercise and one real event with the R8MCC.
Objective: Through December 2023, the Regional Trauma Coordinator will continue in the role of a regional resource by maintaining status as a regional superuser of EMTrack, eICS, and EMResource.
Progress: Continues.

Indicator 325.136(d) 303.4: When injured patients arrive at a medical facility that cannot provide the appropriate level of definitive care, there is an organized and regularly monitored system to ensure the patients are expeditiously transferred to the appropriate, system defined trauma facility.
Regional Score: 2 in 2017 workplan; 1 in 2020 workplan
Objective: By October 2021, the Regional Trauma Coordinator on behalf of the RTN will survey hospital trauma programs on how each facility conducts reviews of interfacility transfers.
Progress: The RPSRO has started discussions on types of patient populations that may not need transfer. The R7 Interfacility Transfer guideline will be introduced to RPSRO and RTAC. We anticipate working on this objective throughout 2023.
Objective: By February 2022, the RTAC will receive the survey findings and recommendations from the RTN based upon information from the RSPRO. The RTAC shall provide a regional interfacility transfer review procedure to the RTN.
Progress: Not completed.

Indicator 325.135(6)(b) 302.6: There are mandatory system-wide pre-hospital triage criteria to ensure that trauma patients are transported to an appropriate facility based on their injuries. These triage criteria are regularly evaluated and updated to ensure acceptable and system-defined rates of sensitivity and specificity for appropriately identifying the major trauma patient. This indicator is directed at the process for prehospital triage of trauma patients.
Regional Score: 3 in 2017 workplan; 2 in 2020 workplan
Objective: By December 2021, using available reports from Biospatial and the Regional MCA Network, the RTN in collaboration with the Regional MCA Network will pilot a validation project focused on Field Triage, i.e., definitions, educational needs, data interpretation and action steps to address identified gaps with an expected 12-month completion date.
Progress: The RTC created reports in Biospatial to identify patients meeting Trauma Triage Step 1 and 2 and where they were transported. This information has been placed into the R8 Inventory for review by the RPSRO. The RTC also created a presentation for the UP EMS

Conference to explain trauma centers, trauma center levels, trauma triage criteria, and documentation. This was a result of data analysis that showed significant gaps in patient care report documentation education.

Regional Performance Improvement

Indicator 325.134(4) 206.1:

The RTN uses data reports to evaluate and improve system performance. This refers to any data reports and the RPSRO Inventory.

Regional Score: 2 in 2017 workplan; 2 in 2020 workplan

Objective: Through December 2023, the RTN and its RPSRO will utilize data reports generated by the State of Michigan, ImageTrend®, MTQIP, and RPSRO Inventory and individual hospital and EMS agencies to evaluate and improve regional trauma care and system performance.

Progress: The RPSRO was seated in October 2022. They met three weeks after being seated by the RTN and were shown Regional Inventories for January – June 2021, July – December 2021, and January – June 2022. Calendar year 2020 is incomplete because a tertiary center is missing data. The consensus of the RPSRO was that each trauma program manager, trauma medical director and c-suite member that oversees the trauma program will receive correspondence from the RPSRO. This correspondence will include explanation of the RPSRO and its review process, aggregate findings of existing data incompleteness and inaccuracies, and the explanation of how to improve system performance.

Indicator 325.135(6) 302.5:

The retrospective medical oversight of the EMS system for trauma triage, communications, treatment, and transport is closely coordinated with the established performance improvement processes of the trauma system.

Regional Score: 1 in 2020 workplan new indicator

Objective: Through December 2023, the RPSRO, working with the Region 8 MCA Network, will utilize data reports generated by the State of Michigan, ImageTrend®, and Biospatial to provide medical oversight of EMS trauma triage, communications, treatment, and transport of trauma patients.

Progress: With the expressed consent of the RPSRO, the RTC shall also continue to feed information back to each MCA regarding patient care report findings and request loop closure.

Indicator 325.135(6)(d) 205.2:

Collected data from a variety of sources are used to review the appropriateness of all-inclusive regional trauma performance standards, from injury prevention through rehabilitation.

Regional Score: 1 in 2017 workplan; 1 in 2020 workplan
Objective: By December 2021, the RPSRO, working with the RTAC will develop a Regional Performance Improvement Plan that includes evaluation on trauma triage criteria and effectiveness, trauma center diversion and provision of care. This plan will be based off suggestions from the State of Michigan, State Trauma Advisory Committee, and American College of Surgeons guidance documents.
Progress: Completed and placed on regional website.

Indicator 325.136(d) 303.4: There is a regional trauma bypass protocol that provides EMS guidance for bypassing a trauma care facility for another more appropriate trauma care facility.
Regional Score: 2 in 2017 workplan; 1 in 2020 workplan
Objective: By December 2022, the RTN, working with the Region 8 MCA Network will develop a regional bypass protocol that clearly defines the process for bypassing one trauma facility for another trauma center more appropriate for the patient's injuries or specialty needs (pediatrics, burns, obstetric).
Progress: Not completed. For the areas that had hospitals fail their trauma designation visits, the RTC met with the MCA Coordinators to discuss bypasses, education of their staff, and how to inform patients.

Continuum of Care

Indicator 325.132(3)(c)(ii)(F) 308.1: The lead agency has incorporated, within the trauma system plan and the trauma center standards, requirements for rehabilitation services including interfacility transfer of trauma patients to rehabilitation centers. The regional work plan addresses the integration and participation of rehabilitation services within the continuum of care for trauma patients.
Regional Score: 1 in 2017 workplan; 2 in 2020 workplan
Objective: By December 2020, the RTN shall expand the current 24/7 medical specialties database to include information from each hospital on where they transfer specialty populations.
Progress: Anticipated completion in 2023.
Objective: By April 2021, the considerations for rehabilitation transfer shall be collected from the trauma program managers within the region for review by the RTAC.
Progress: Objective on hold while a statewide rehabilitation project commences.
Objective: By February 2022, the RTN will establish a formal communication pathway of regional trauma initiatives to licensed rehabilitation facilities within the region that are utilized for trauma patients.

Progress: UPHS Marquette is the only licensed rehabilitation facility in the region. Formal communication is on hold until the statewide project is completed and can be introduced.

Trauma Education

Indicator 325.132(3)(C)(ii)(D) 310.3,4,6:

The regional trauma network establishes and ensures that appropriate levels of EMS, nursing and physician trauma training courses are provided on a regular basis.

Regional Score: 2 in 2017 workplan; 2 in 2020 workplan

Objective: Throughout 2020, the RTN will encourage hospitals and MCAs to identify their regularly offered trauma education programs. The RTAC will consolidate a master calendar of scheduled trauma education programs by January of 2021 based on information from hospitals, MCAs, and share/exchange lists with Region 7. The master calendar will include programs open to out-of-health system employees and may be out-of-region and out-of-state.

Progress: There was not participation in the formation of a master calendar.

Indicator 325.132(3)(C)(ii)(D) 310.10:

As new protocols and treatment approaches are instituted within the regional trauma system; structured processes are in place to inform or educate all personnel of those changes in a timely manner.

Regional Score: 1 in 2017 workplan; 2 in 2020 workplan

Objective: The RTN will continue to inform of educational offerings through utilization of its Facebook page through 2023. By December 2020, the RTN will have developed a one-page electronic flyer to disseminate to trauma program managers that can be utilized to encourage their staff to follow the Facebook page.

Progress: When the RTC is informed of any trauma education offerings, she places those on the R8TRAUMA Facebook page.

Regional Summary:

Two (2) hospitals lost their trauma designations, four (4) hospitals are still provisional, eight (8) of the 14 hospitals had turnover with their trauma program manager and/or trauma medical director. Hospital administrators have also experienced turnover in addition to more hospitals being acquired by corporate health systems. Collaboration is occurring with the Michigan Office of Highway Safety Planning, Michigan DNR, Upper Peninsula Traffic Safety Network, Northern Michigan University Center for Rural Health, UP Health System School of EMT, Region 8 MCA Network, Region 8 Healthcare Preparedness, Central UP Senior Network, Marquette Alger Regional Education Services Agency and UP school nurses.

Regional System Evaluation in accordance with Administrative Rule Requirements:

- ☐ Regional trauma network and committee meetings have taken place as scheduled (quarterly) in accordance with the Open Meetings Act.

If not completed, please explain: in-person meetings are not practical for the expansive geography of the region. Two are scheduled for 2023.

- ☒ Schedule and information regarding RTN Board and RTAC posted on the trauma website
- ☒ Annual confirmation that members of the RTAC are currently involved in trauma care completed.
- ☒ All MCAs are participating in the RTN.

- ☐ Documentation that all hospitals in the trauma network are participating in:

- ☐ Regional Injury Prevention – not all hospitals have attended RTAC.
- ☐ Regional Performance Improvement – not all hospitals have attended RTAC.
- ☐ Submission of registry data to ImageTrend – not all hospitals have submitted complete data.

- ☐ Regional trauma plans completed (attach copy of plan or state “in progress”)

- ☒ Regional Injury Prevention
- ☐ Regional Trauma Education
- ☒ Regional Performance Improvement

If not completed, which plans are missing and why? Regional Trauma Education is not being worked on in Region 8.

- ☒ Regional PI process in place; Inventory data reviewed, and trends (if noted) are being monitored. PI process that includes two levels of review is place (as needed). RPRSO corresponds annually (at a minimum) with RTN regarding PI. Minutes, materials stored by RTC. If not completed, please explain:

RTN Board Chairperson:

Shelly Reeves

Date:

11-3-2022

Regional Trauma Coordinator:

Nelson

Date:

11/3/2022